DOCUMENT RESUME

ED 288 935 UD 025 914

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TITLE Strategies for Improving the Educational Outcomes of Low Achieving and Ethnic Minority Students: The Pittsburgh Experience, 1980-86. Revised.
PUB DATE May 87
NOTE 46p.; Paper presented at the Association for Supervision and Curriculum Development Annual Conference (New Orleans, LA, March 22, 1987).
PUB TYPE Reports - Descriptive (141) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Academic Achievement; Attendance; Educational Change; Elementary Secondary Education; *Instructional Improvement; *Low Achievement; Low Income; Mathematics Instruction; *Minority Group Children; Racial Differences; *Urban Education
IDENTIFIERS *Monitoring Achievement in Pittsburgh; *Pittsburgh School District PA

ABSTRACT

In the fall of 1980 the Pittsburgh Board of Education embarked on a program of change and improvement for all public schools in the city. A comprehensive needs assessment was conducted by groups with broad school and community interests. The need to improve student achievement in basic skills was identified as the priority. The Monitoring Achievement in Pittsburgh (MAP) program was developed to address the need for a common instructional program in mathematics; and the School Improvement Program was created to provide focused educational reforms to schools with the most severe achievement problems. Achievement scores have increased since 1980. Now new initiatives are necessary to target high risk students. The new programs are the following: (1) Kids Incorporated--a rewards program which maintains the students' enthusiasm for learning; (2) in-school tutoring which develops the students' self-concept as well as their academic skills; (3) Superstars--a rewards program which also develops self-esteem; (4) an attendance monitoring system which notifies parents of student absences; (5) individualized inservice and action plans which deal with cultural and value differences; and (6) a computer-assisted program which monitors student achievement. (VM)

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11-25-87

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Strategies for Improving the Educational Outcomes of Low Achieving and Ethnic Minority Students: The Pittsburgh Experience, 1980-86

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Presented at the annual conference of the Association for Supervision and Curriculum Development, New Orleans, LA, March 22, 1987.

UD025914

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Revised May, 1987

In response to a number of serious educational problems such as low student achievement, a high dropout rate, an increasing proportion of students going elsewhere for their education, and a lack of public confidence in the system, the Pittsburgh Board of Public Education embarked upon an ambitious system-wide renaissance in the Fall of 1980. A comprehensive needs assessment (Cooley and Bickel, 1981; 1986) of different stakeholder groups and an analysis of existing school district records provided an empirical baseline for the improvement efforts.

Necessarily, the design for the needs assessment incorporated literally every stakeholder group to determine their perceptions of the current conditions in the district, and recommendations regarding improvement. Drs. William W. Cooley and William E. Bickel from the Learning Research and Development Center (LRDC) at the University of Pittsburgh were retained to coordinate the research program and interview Board members. Additionally, students, teachers, administrators, clerical and support staff, business and community leaders and parents (of both public and nonpublic school children) were either interviewed or administered structured questionnaires. Each stakeholder group was asked to: 1) rate the extent to which various conditions (e.g., student absenteeism, low teacher morale) were prevalent and posed serious problems in the public schools; 2) rank order those conditions according to the perceived need for improvement; and 3) provide additional comments or suggestions in an open-ended response format.

The need to improve student achievement in the basic skills was identified as the number one priority by the participants of the needs assessment. The identification of achievement as the most serious problem confronting the district was neither surprising or inconsistent with analyses

of existing data. For example, in 1980 thirty percent of the district's tenth graders failed the Basic Skills Assessment test in comparison to a national average failure rate of twelve percent. Likewise, twenty-five percent of students leaving the third grade could not read well enough to learn from reading.

The problem of low student achievement was further compounded by a lack of coordination between the instructional programs across schools, grade levels, and remedial versus regular classrooms. That is, the analyses of variations in achievement levels across schools revealed rather large variations in the scope and sequence of instruction within a given grade level. As a result, large discrepancies often existed between the overlap of teachers' instructional content and the material actually assessed by the nationally standardized tests being used to monitor student performance (LeMahieu, 1984).

The disaggregated analyses also revealed the problem of low student achievement to be magnified in certain schools, particularly those with large percentages of black and/or low income children. That is, while approximately twenty-five percent of the third graders in the district as a whole could not read well enough to derive meaning from what they had read, the percentage of sub-criterion readers was as high as fifty percent in some schools and as low as zero in other schools. Clearly, the district needed educational reform efforts that was both comprehensive in scope and focused in specific problem areas and locations.

The Monitoring Achievement in Pittsburgh (MAP) was developed during the 1980-81 school year and implemented within the mathematics curriculum the following year to address the need for a common instructional program across schools. Committees of teachers were convened to identify terminal

objectives to be mastered by students at each grade level and develop a corresponding set of monitoring instruments. Twenty objectives were commonly agreed upon for each grade level. Twenty items, one for each objective, were developed for four mathematics tests per level administered at six week intervals. During succeeding years, similar MAP objectives and tests were developed for reading, composition, grammar, critical thinking, and science. With each test providing a common instructional program for sixty percent of the total curriculum within each of the content domains, the school district had launched a comprehensive, measurement-based program which addressed one of the critical dimensions of the goal of improving student achievement.

The need to provide a more focused educational reform to schools with more severe problems in student achievement was addressed through the creation of the School Improvement Program (SIP). Under the direction of Dr. Louis Venson, a former elementary principal with an impressive track record in promoting high achievement within formally low achieving schools, a team of principals, teachers, supervisors, and central office administrators was convened during the spring and summer of 1981 to develop an action plan for SIP. An ambitious and multifaceted proposal for implementing the School Improvement Program on a three-year pilot basis was presented to and approved by the School Board in July, 1981. The major themes identified in the SIP proposal included:

- o Improvement in basic skills.
- o Development of a collaborative planning model for school improvement that involved the principal and faculty of each pilot site.
- o Development of an achievement monitoring system within each pilot site which facilitated the identification of students and classrooms performing below mastery levels.
- o Provision of a dramatically revised supervisory model for each site.

Seven elementary schools were selected for participation in SIP. Utilizing a computer-based monitoring system at the core of the program, the program's directors and supervisors provided support to the administration and faculty of some of the most problematic schools and student populations within the district, and thereby addressing yet another dimension of the student achievement problem within the Pittsburgh Public Schools.

Given the many dimensions of the problem of low achieving students, with particular focus on the minority population, it becomes immediately apparent that there is no single solution. As a result, there has been a diverse response pattern by schools across the Pittsburgh Public School District. Administrators working collaboratively with teachers, parents and students have explored many different avenues to address the spectrum of difficulties inhibiting "school success" for all students. Even though the efforts to improve student achievement have been varied, there are three main groupings of related activities being implemented across the district.

These three thrusts are rooted deeply in the literature that identifies student self-concept, time on task and effective teaching as variables that contribute significantly the rate and degree of student achievement. Brookover (1979), Purkey (1970), Williams (1968), Cantrell et al (1977), Edmonds (1978) and Hawley et al (1974) have stated that students perceptions of themselves as learners and pervasive school attitudes about learning and teaching can significantly impact student achievement. This body of research has particular relevance when we consider the powerfully damaging societal forces that poor and minority students confront on a daily basis. Among these forces are economic deprivation, low level performance expectations, prejudice, discrimination and inadequate internal support systems.

In response, one thrust is for schools to attempt to provide low achieving students opportunities to develop and nurture positive self-concepts as learners. This is being pursued with the belief that "success breeds success". Another major thrust in the district relates to the belief that students have to be investing time in the learning process in order to learn. In essence, little time-on-task generally equals little learning, which equals little achievement. The research of Bloom (1974), Stallings (1980), Berliner (1983) and other notables in the field seem to clearly support this conclusion. Consequently, schools across the district have attempted to address this problem by attacking poor student attendance patterns. The third major thrust relates to what happens when the students are attending school and classes on a regular basis. This thrust relates directly to the importance of effective teaching once the student is present and prepared to learn. Hunter (1969), Rosenshine (1983) and Doyle (1985) are a few of the many educators who seem to embrace a systematic approach to instruction that increases the probability of achievement and school success for students. These three thrusts generally represent a cross-section of approaches to deal with the problem of low achieving students.

Even though achievement scores have steadily climbed since 1980, and well over seventy percent of the district's students are currently scoring at or above national norms, the low achieving student is a major concern. This concern becomes amplified when large percentages of this low achieving population are identified as poor and/or minority students. Each school in the district, over the past two years, has begun to analyze the parameters of its particular problems and implement action plans to meet the identified needs. Given the complexity of the problem, these plans generally reflect a combination of the aforementioned thrusts.

Each of the following planned program implementations is representative of the many different efforts being currently undertaken. It also should be stated that each school is generally representative of a typical inner city school with a minority population of at least fifty percent. Other district demographics, such as high poverty percentages (utilizing indicators such as free federally subsidized lunches, etc.) and significant drop-out rates are also reflected in this sample of programs. In addition and for the sake of clarity, only one aspect of a successful school program will be highlighted. This "target program" approach will hopefully provide a sense of impact.

KIDS INCORPORATED

First, there are many programs that illustrate the thrust of developing positive self-concepts in students through skill enhancement and success building. Among the notable examples is one program at Brashear High School. Mr. Robert E. Nicklos, Principal, his administrative team and staff have instituted a program called "Kids Incorporated" that has been very successful over the past two years. The focus of this program is to support potential failures at the ninth grade level.

In the Pittsburgh Public Schools research indicates that ninth grade is a critical point in the lives of many young adults. This is where the drop-out rate has been the greatest. Kids Incorporated is a program that (1) identifies ninth grade students who are failing all academic subjects by the third report period; and, (2) recommends students for admission who have reasonably stable attendance and a desire to pass and continue their education. After a contract has been signed with the student and parents, indicating a sincere willingness to attend all sessions and put forth a total effort between March and August, a program servicing twenty-five students is launched.

This program features a modified program of studies for the remainder of the school year and throughout the summer. During the spring report period the students attend specially designed classes in English and social studies as their total academic experience. They receive full credits for the successful completion of this intense program. Grammar, composition, oral communication, study skills, coping skills, values, self-analysis, ego-development and self-concept are some of the topics explored in depth with students. Community involvement is integrated through a series of field trips and visitations to the school by community leaders. This reality based approach grows directly from "mini-unit" experiences in the career awareness curriculum. The summer program focus is on math and science. Full day sessions reinforcing basic math skills, consumer math, inquiries in science and planning for the future, round out this credited curriculum. When you factor in a program of positive reinforcement for progress and achievement you have a clearer picture of the depth of the program.

Students receive on-going rewards, such as jackets, certificates, pins and continuous positive feedback from administrators, teachers, counselors, social workers and other significant adults on their progress. This continuous monitoring, counseling and feedback has made a powerful difference to students. They've indicated it in writing and in oral interactions.

In fact, the program is so successful, plans are being explored for expansion of the program. The program boasts of a seventy-five percent success rate. Students who would probably be on the streets have elected to continue their education after completing phase one of the program.

Phase two of the program helps to maintain student enthusiasm for the process of learning and achievement. This phase features students selecting an adult mentor. This adult can be anyone who the student feels comfortable

with on the staff. At Brashear this represents a pool of over one hundred twenty-five adults. The student and staff member develop a schedule of meetings to discuss topics of significance to the student. With this added dimension student attendance has improved as well. Students seem to feel better about themselves, achieve at higher levels and decide to stay in school. For that reason, it has been identified as one successful program to consider for district-wide dissemination.

IN-SCHOOL TUTORING

Another approach to the same thrust of improving student self-concept and achievement, via skill building, is in place at the Frick International Studies Academy. The Frick Academy is a middle level magnet school which has a minority population of fifty percent. Mrs. Ernestine Reed, Principal, with the cooperation and involvement of the staff, identified skill building as a key component for student success in this dynamic program. A significant number of students were experiencing difficulty in key academic subjects. As a result the typical feelings of frustration, inadequacy and failure were being manifested. In light of some of the research findings of Rosenshine and Furst (1969) and Cohen et al (1982) that highlighted the power of effective tutoring programs, an in-school tutoring program was developed. A cadre of thirty students from the nearby University of Pittsburgh, nineteen community volunteers, parents and staff members conduct small group and individual tutoring sessions during the school day, as well as after school. Students are identified by staff and encouraged to participate. Students also identify their own needs and sign-up independently. And, parents often encourage students to participate. Parents also support this program through "Homework Observation and Monitoring for Excellence in Schools" (HOMES). This new dimension asks parents to play

an active role in supporting student independent practice at home (See Appendix A). In all instances accommodations are explored to develop an individualized schedule of sessions for each student experiencing difficulty.

Because of the voluntary nature of the program students seem to invest more of themselves, thereby getting more out of the program. The preliminary analysis of Monitoring Achievement in Pittsburgh (MAP) scores at the Frick Academy indicates steady improvement in student achievement. It can be said that the tutoring program which fosters a positive self-concept through skill development has contributed significantly to school-wide student progress in general and minority student progress in particular.

SUPERSTARS

Still another program that illustrates the same self-concept development thrust is called Superstars. So many students never receive recognition for their efforts and consequently they devalue themselves as learners and achievers. This often contributes to the "self-fulfilling prophecy failure-syndrome" that low achieving students are cycled through. This phenomenon was recognized at Margaret Milliones Middle School and the Superstars program was developed as one response to the problem.

Superstars is an incentive program at the secondary and middle school levels which encourages and recognizes student progress. Dr. Delphina Briscoe, Principal at Margaret Milliones Middle School, as one example, may at the end of a report period be distributing over one hundred fifty certificates, buttons and free dance tickets to students who have demonstrated significant progress in school. The criteria for significant progress is raising any two grades without dropping in any. Therefore, a potential failure at the beginning of the year may finish the year as a solid "C" student, if he or she really puts

forth the effort. In many situations that scenario has held true. Even if a student has failed all subjects during the first report period and by the end of the second is passing two, they are recognized. What has been discovered is that a student who has never even dreamed of being an honor student now has attainable goals within reach.

Superstars has made a significant difference in student attitudes as measured by attitude inventories of self-concept. It has also contributed to improved school spirit and attendance by low achieving students. In the Pittsburgh Public Schools a student fails automatically after being absent over twenty percent of the report period. There are few exceptions. In essence, you must attend to pass. Achievement on tests has been linked in many ways to attendance and time-on-task. Therefore, by increasing student attendance there seems to be a benefit in the area of student achievement. Those students who seriously value their recognition as students making progress and Superstar awards often improve in several areas including attendance. The feedback from principals at the secondary and middle level who have instituted the program with various reward systems have nothing but positive results to share. Even parents of low achievers are excited by the prospect that there is some good in the youngsters as well as "the schools involved".

These are a few of the programs that focus primarily on the development of positive concept with students. However, there are other thrusts that have also yielded positive results in the district. One such thrust is that of time-on-task.

SCHOOL ATTENDANCE MONITORING SYSTEM

At Allderdice High School the Principal, Mr. William Fisher, translates the term, time-on-task, to mean that students must first come to school, and second, attend classes in order to maximize achievement opportunities. Even

though Allderdice is one of the two highest achieving secondary schools in the district, the administrative team and staff at Allderdice are still concerned about low achieving students. Allderdice reflects a Pittsburgh black student population of approximately twenty-eight percent. Even so, there are a disproportionate number of absences attributed to that population. As a result a program has been developed and piloted at Allderdice to increase school and class attendance.

After careful school-based research, administrators and staff theorized that student attendance seemed to improve when parents were immediately notified of student absences. The problem of time and size of school (approximately 2000 students) limited a viable program that might absorb most of the teacher preparation time during the day. In addition, many if not most parents were difficult to contact during the day. Consequently, an electronic home contact system was developed.

This School Attendance Monitoring System is programmed during the day with student names and home phone numbers from the main office. The phone dialing system with a pre-programmed message concerning student attendance is then put into effect during the evening hours. The system automatically redials periodically until appropriate contact is made with the home. This system alone is not the total answer, but it is one answer to the need for increased home contact. This increased home contact has been attributed with an increase in student attendance of sometimes as many as forty to fifty students a day. This attendance monitoring system has been so effective that it is currently being expanded to other schools experiencing similar difficulties.

In concert with this program at Allderdice, the administrative team also employs a classroom monitoring process to reduce "class cutting". A "Cut Committee" of teachers and administrators systematically monitors class attendance patterns randomly throughout the school day. Parents are personally

contacted when absent students are identified. The smaller numbers permit students to be counseled and disciplined immediately for their behavior. Together these two dimensions of attendance monitoring and direct action have contributed to improved attendance and time-on-task for Allderdice students.

Of course, there are other programs of attendance monitoring across the district that are noteworthy. There is even one for teachers. But, the program at Allderdice accentuates how new technology is being employed to assist administrators in addressing school problems.

The third thrust of programs in the district takes a different tact in addressing problems related to low achieving students. This thrust approaches the problem by targeting effective teaching strategies to impact student achievement. Over the past five years every school in the district has been immersed in the Pittsburgh Research-based Instructional Supervisory Model (PRISM) which is based on the "Effective Teaching Model" as developed by Dr. Madeline Hunter. This has made a significant difference in the quality of instruction, as highlighted by extensive classroom observation. Even so, there are still aspects of effective instruction that haven't been vigorously pursued, especially with particular reference to low income and minority students.

INDIVIDUALIZED INSERVICE AND ACTION PLANS

Among those topics are sensitivity to cultural differences, the changing family structure and its impact in the classroom and intensified individualized instruction. At Allegheny Middle School under the leadership of Mr. Robert Pipkin, Principal, the staff pursued these topics in depth. Allegheny Middle is a school located in the center of what could be described as a high poverty, high crime area. Both black and white students appear equally affected by the devastating level of poverty in their community. The school has a minority population of larger than fifty percent. The staff and administration recognized

that many of the interpersonal problems between students and teachers and resulting classroom difficulties could be attributed directly to cultural and value differences. Consequently, the staff became deeply involved in inservice training.

This training highlighted how students might perceive prejudice and discrimination in the classroom. It also highlighted "biases and other baggage" that teachers carried on a daily basis. In addition, it highlighted strategies that teachers could employ to deal with cultural and value differences without compromising quality education. In fact, this was highlighted quite effectively as the principal openly discriminated against staff members, subtly discouraged others and during sessions explored the emotions and feelings associated. These concrete real-life experiences made the theories quite clear. As a result, each team developed individualized action plans outlining how they would modify instruction on an on-going basis to meet student needs. Plans incorporated interdisciplinary projects to help students transfer skills. Plans also incorporated improved counseling activities, as well as study skill development activities. Even more than this the plans reflected a greater sensitivity to the diverse needs of students and an increased awareness of how teachers' behavior impacts student achievement. A number of teachers are currently receiving on-going training in the "Teacher Expectation Student Achievement" Program (TESA). This program highlights such skills as the importance of employing wait-time, touch, positive reinforcement, proximity and feedback particularly with low achieving students.

Teachers at Allegheny have seen changes in themselves, as well as students, as a result of this year's program. This type of effort is also being considered for replication across the district. Hopefully, improved achievement will be only one of the benefits of this focus on teachers and teaching. (See Appendix B for sample.)

COMPUTER ASSISTED PROFESSIONAL

Another dimension of this thrust was developed at the elementary level and is being considered for expansion at the middle and secondary levels. This program is called the Computer Assisted Professional Program. This program was developed by Dr. William Cooley of the Learning Research and Development Center (LRDC) of the University of Pittsburgh in cooperation with Dr. Louis Venson, Director of the district's School Improvement Program (SIP). This student achievement monitoring and intervention program provides on-going feedback and explores instructional alternatives to improve achievement. An elaborate computer system which carries detailed information on the progress of each and every student in the building on a weekly basis is the core of the program. Every two weeks student progress is examined in detail with instructional teams. Everything from attendance patterns and MAP test results to teacher grades and curriculum patterns are analyzed.

As a result a prescription by the team, accompanied by intensive supervisory support is put into action. Parents are notified of progress. Students are kept informed of their accomplishments and areas needing improvement. Teachers are apprised of progress toward stated student performance objectives. And, program modifications are on-going based on results. This is probably the most intensive program in terms of time and manpower investment of all programs mentioned. But because of the preliminary results this data driven system, which focuses on teaching, it is currently being expanded across the district (See Appendix C).

FUTURE DIRECTIONS

The careful reader has, no doubt, observed that the majority of the special assistance programs for low achieving students described thus far have

operated exclusively at the individual school level. In fact, a recent survey discovered that 28 out of 37 such programs which are currently operating within the Pittsburgh Public School System are wholly contained within individual school buildings (Bickel, Bond, and LeMahieu, 1986). Furthermore, the majority of these programs are supported financially by the individual schools. It thus seems apparent that the creation and success of the remediation efforts within the district can be largely attributed to the commitments and dedication of the administrators and teachers who have developed these programs.

However, such individual initiatives do not offer the comprehensive, system-wide level of intervention that is clearly needed to address the continuing problems of low achievers. For example, despite the modest success which has been achieved in reducing the dropout rate over the past five years, still approximately one out of every four students entering the ninth grade will not graduate with their peers. Further, the disparity in the educational outcomes of black and white students remains alarmingly large: the discrepancy between the percentage of black versus white students who perform at or above the national norm in reading increase from a 13 point gap at grade 1 to a 30 point gap at grade 9 through 12.

In recognition of the need for a system-wide thrust, the Board of Directors identified the need to reduce the racial achievement gap and enhance the performance levels of low achieving students as two of the top priorities for the district at its legislative meeting in April, 1986. Immediately after the adoption of these priorities, planning groups were formed to clarify the specific causes for the significant gaps which have created the two-tiered outcome system and propose corrective strategies and programs. A summary of the plans developed by the Racial Achievement Gap Committee and the Low Achieving Students Committee can be found in Appendix D.

A review of the seven recommendations which are contained in the two committees' reports reveals three general remediation strategies: 1) **staff development experiences** for teachers and administrators which identify and correct differential beliefs, expectations, and levels of sensitivity towards low achievers; 2) programs which enhance students' **intrinsic and extrinsic motivation** levels to stay in school and perform well; and 3) **alternative instructional approaches** which vary either the setting, the mentor, or the scope and sequence of instruction. The Board formally approved the proposal for the Community Educational Activity Center and the Secondary Cooperative Learning Program, at its April, 1987 meeting. Implementation strategies are currently being developed for the other recommendations.

In summary, this sampling of programs represents efforts by the Pittsburgh Public School District to confront and attack the problem of low achievement by students. Rather than being satisfied with the fact that Pittsburgh Public Schools is one of the highest achieving urban school systems in the nation, the Board has challenged professionals in the district to be even better. The Board has issued that challenge by identifying low achieving students and bridging the achievement gap between black and white students as priorities. They also have demonstrated seriousness behind that challenge by establishing district-wide committees to research the problem and potential solutions. Further, they have emphasized commitment through funding. Consequently, as noted in this paper, the educators, parents and students of the Pittsburgh Public Schools accepted the challenge and are responding with significant progress.

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APPENDIX A

Frick International Studies Academy
107 Thackeray Street
Pittsburgh, PA 15213

February 24, 1987

Dear Frick I.S.A. Parent:

The Governor's Commission on Excellence in Education has as an integral part of its plan the involvement of parents in the homework of their children. In the spirit of this project, the administration and staff of Frick I.S.A would like for you to actively participate in our HOMES (Homework Observation and Monitoring for Excellence in School) Program throughout the months of March, April and May.

To participate in our HOMES Program, each parent is requested to:

(1) Provide a homework log or notebook for your child.

(2) REVIEW, CHECK, and SIGN the log each night to monitor the completion of assignments.

(3) Encourage your child to complete no less than 80% of the homework assigned for a given subject during a report period.

(4) Set aside a regular study time.

(5) Provide a quiet, well-lighted study area.

(6) Read and be responsive to the information reflected in "Parents, Be a Part of It: Homework" pamphlet.

In accordance with the Middle School guidelines for homework, teachers have been instructed to give assignments in their respective subject areas on an average of three (3) to four (4) times each week, resulting in approximately 1 to 1 1/2 hours of at-home study time per night.

It is our hope that, over the next three months, we will have 100% participation in the HOMES Program which certainly will bring about increased student achievement and motivation for learning at FISA. Recognition will be given at our June Honors Assembly to students who have been diligent about completing homework.

Sincerely,
Ernestine A. Reed
Principal

THE PARENT PLEDGE

- I want my child to have the best possible education and I realize that strong school systems are essential.
- I will provide a home environment that will encourage my child to learn.
- I will help my child build a small but meaningful home library.
- I will insist that all homework assignments are done each night.
- I will discuss at dinnertime what my child has learned at school each day.
- I will include stimulating books among the presents I give my child.
- I will review newspaper stories and TV newscasts with my child and discuss how the news may affect our lives.
- I will meet regularly with my child's teachers.
- I will remind my child of the necessity of discipline in the classroom— especially self-discipline.
- I will help my child appreciate and enjoy the excitement in learning and the thrill of an inquiring mind.

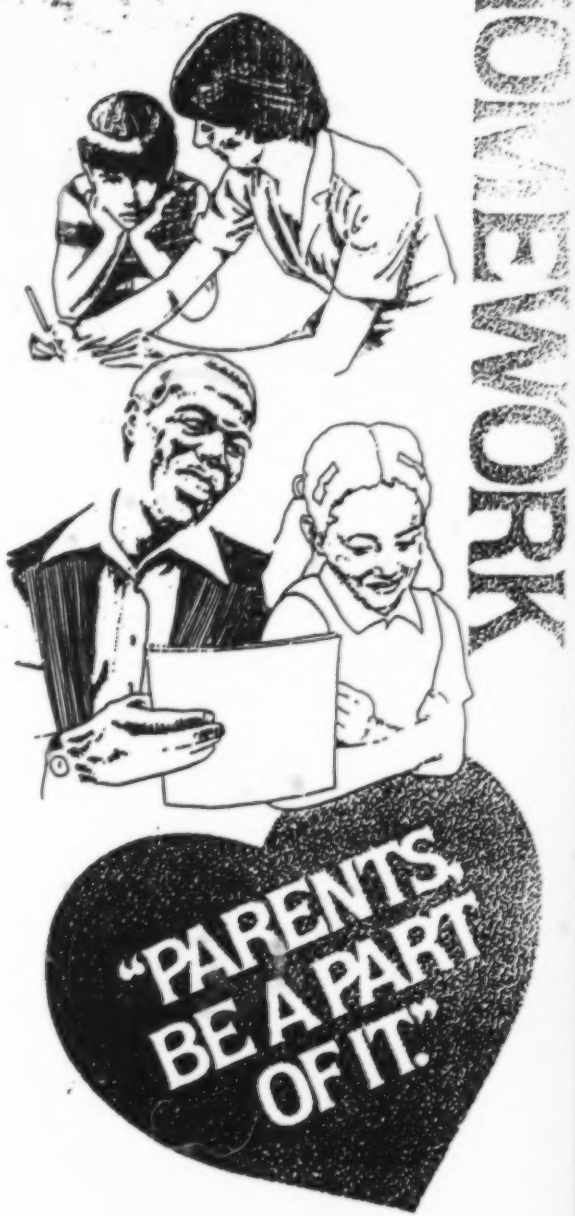
The pledge above was published in the Wall Street Journal by United Technologies Corporation, Hartford, Connecticut 06101.

Schools in Pennsylvania are currently developing or updating their policies on homework, attendance, and discipline. If you have questions about your school's policies on homework, contact the principal. If you want to know more about homework and student achievement, call your school counselor.

It's your child's education.
Parents, Be a Part of It.

Commonwealth of Pennsylvania
Dick Thornburgh, Governor

An Agenda for Excellence in Pennsylvania Public Schools



HOMEWORK

HOMEWORK/hōm-wərk/n. "Any work planned or approved by the teacher to be completed by the student outside of the regular classroom without the immediate and direct supervision of the teacher."

Remember homework? Whether you wanted to or not, you had to do it. Remember those math problems you had to finish before you were allowed to go outside to play? Or that research paper in English class that you had a hard time beginning? Or that seemingly impossible experiment in science that worked out after all!

Regardless of how you felt about homework then, what is important is your attitude now. Homework has been identified in almost all national and state reports on education as a vital factor in increasing student achievement. And one important element should be added to the above definition . . . you. When your child has homework, the teacher is not there to supervise. You are. If you have a positive attitude toward homework, then the odds are your child will, too.

In *Turning the Tide: An Agenda for Excellence in Pennsylvania Public Schools,* Governor Dick Thornburgh encourages local school districts to seek ways to get parents involved in school programs. He says: "School districts should expand their efforts to involve parents in the education process. Parents who are actively involved in and concerned about their children's schoolwork will enforce good study habits, encourage their children to take more demanding courses, and nurture their children's creativity, curiosity, and desire to learn."

Let's look at why meaningful homework is so important to schools and to your child.

When a teacher assigns a homework project, he or she usually has these things in mind:

- Promoting good study habits
- Developing a sense of responsibility and independence
- Helping the child master a skill
- Enhancing and stimulating the child's creativity
- Encouraging the child to learn new things
- Making sure the child understands what's been taught
- Informing parents of what their children are learning in the classroom

To meet these objectives, homework must be looked upon as important and necessary. Cooperation and communication between the home and school are essential if home assignments are to make a significant contribution to your child's education. The time you share with your child on these assignments will be beneficial to you both.

10 WAYS YOU CAN BE A PART OF IT.

1. Review schoolwork with your child and sign homework assignment sheets.
2. Cut down on TV time and turn off the radio while your child is studying.
3. Provide an area for your child to study that is away from the center of activity in your home.
4. Set aside a regular study time, and help your child organize assignments.
5. Be aware of homework assignments and talk to teachers to make sure the work is being done.
6. Read at the same time your child is studying—sort of a "study hour" for the whole family.
7. Provide educational trips to libraries, museums, local sites and others, if possible.
8. Ask your children questions about what they have learned.
9. Set a limit on extracurricular activities if they interfere with studying time. Help your child control the urge to "be in everything."
10. Support your children while they're doing homework by checking in every now and then to see how things are going and being available to help if they need it.

APPENDIX B

PROJECT " I.S."

INTERVENTION STRATEGIES

6A TEAM
DECEMBER 2

INTERVENTION STRATEGY

OVERALL GOAL: To improve the success and achievement of an identified population of students.

PURPOSE : To provide extensive and personable attention to students.

To promote and communicate a high level of commitment to the success of these students.

IDENTIFIED BY: Sixth grade teachers in House A.

CRITERION FOR STUDENTS RECEIVING "I.S." :

1. Students appear to have low self esteem.
2. Students demonstrate patterns of not completing class assignments and tasks.
3. Students demonstrate poor compliance with homework assignments.
4. Students demonstrate unacceptable social behaviors when interacting with others.
5. Parents agree to assist and support student effort.

PROJECT " I.S."

OBJECTIVES: 1. To develop positive self-esteem.
2. To provide activities and individual tutoring to students who are achieving below grade level.
3. To promote and reinforce more positive social skills.
4. To encourage the demonstration of respect among fellow students.
5. To develop skills which promote self-control in given situations.
6. To develop an awareness of acceptable social standards within the team.
7. To promote increased opportunities for success.

SHORT TERM GOALS: DECEMBER 1986 - JANUARY 1987

STRATEGIES: 1. Change of homerooms(specific students)
2. Parent conferences (Beginning of program,throughout program as necessary, end of program)
3. Parent/ Student/ Team contract
4. Individual and small group counseling via the school counselor and the team teachers.
5. Individual tutoring - team teachers working with students,remediating in students area of weakness; Chapter I teachers assisting specific students.
6. School Psychologist will meet in small group counseling session.

ASSESSMENT/ EVALUATION: 1. Biweekly reports will be sent home informing parents of student progress.
2. Each student will have a daily progress report
3. Confidential Inquiry forms will be completed by academic teachers.
4. DEC 410's will be initiated for certain students.
5. Parental phone contact
6. Counsel session forms

EXTRINSIC REWARDS TO STUDENTS WHO HAVE ACHIEVED BIWEEKLY GOALS:
1. Good Newsgram
2. Certificates
3. Stickers
4. Out of school field trip, accompanied by team teachers.

6A Team Teacher Release Schedule

Monday - 2nd period - Ms. Murphy

Tuesday - 1st period - Ms. Jamison

Tuesday - 4th period - Ms. McKenna

Wednesday - 1st period - Ms Znoy

Thursday - 3rd period - Ms. Carlino

Friday - 7th period - Ms. Butler

OBJECTIVES

1. Each teacher will spend a specific amount of time with students either tutoring them within the particular class or in an individual counseling session weekly.

2. Teachers may also utilize this time to work on individual folders, make contact with specific parents on the phone or review the plans for student.

3. Each team teacher must submit written objectives for that particular week in regards to what their plan is for their release period.

4. Each release time plan must be completed by the Friday before the oncoming week, so that Dr. Barnes may review it.

STUDENT FOLDERS

1. This folder will be monitored by the homeroom teacher.
2. Biweekly reports will be kept within this file.
3. Daily progress reports will be kept within this file.
4. Teacher Confidential Inquiry forms will be kept within this file.
5. Counsel Session forms.

88 PLAN

FOR

TARGETED LOW-ACHIEVERS

TO

DEVELOP A POSITIVE SELF IMAGE ALONG WITH

ACADEMIC ACHIEVEMENT

Submitted by:
Diane Dwulit
December 1986

The academic success that our students experience in middle school is a possible indicator of positive high school years and thus a lead in to a successful career and productive life. Along with positive educational experiences, the transescent students must learn to feel better and better about themselves and their accomplishments. The development of a positive self image together with appropriate knowledge increases our students chances of becoming more well rounded individuals.

The goal of the 88 team is to have targeted students develop a sense of feeling good about themselves while improving their academic skills. These goals will be achieved in the following ways: content teachers making adaptations and additions to their teaching techniques, an attendance check-in and counseling program directed by the Social Worker, and a teacher/student "Buddy Program".

Reading and Math :

Targeted students will participate in a homework club that will stress individual needs of each person in order to increase their M A P scores and basic skills.

On occasion, in Math, peer teaching will be used to reinforce basic skills with targeted students.

Language Arts :

The teacher will incorporate the T E S A model into the daily lessons. The low achievers, targeted students, will receive more positive verbal and physical contact from the teacher.

Science:

Science books written on a lower reading level will be used with the targeted students. The material covered will be similar for low achievers and the on grade level readers.

Social Studies:

Oral reports and tests will allow the below grade level students to succeed in a content area that places an emphasis on reading.

Attendance Check and Counseling :

Five 88 students will report on a daily basis to the Social Worker for an attendance sign in sheet. They will be returned the following morning to the Social Worker in order to receive another sign in sheet. A group counseling session will be initiated in order to develop a better

self image. The sessions will be once a week and run for a minimum of six weeks. With better attendance and more time on task, the students academic progress will move in a positive direction.

Participating 88 students:

Anthony Bell
Shawniece Booth
Matthew Burton
Debbie Mangan
Keith Mangle

Buddy Program :

Team teachers will be buddied up with two targeted students. The purpose is to give special attention to the students to develop a sense of comfort and self-worth. The time could occur in the halls, lunch room, school activities or in the classroom. The attention could motivate the student to become more actively involved in the educational process.

Student	Buddy
James Beard John Ordean	Mr. Stypula
Asaki Howard Mark Stanley	Mrs. Greer
Shawniece Booth Keith Mangle	Miss Owulit
Jackie Flippings Michelle Persinger	Mrs. Walker
Eric Fugent Shawn Jones	Mr. Robinson

December 2, 1986

To: Mr. Lipkin, Principal
Mr. Barnes, Dean

From: M.A. Bryant, Team Leader

Re: Plans to Improve the Achievement of Low Achieving Students

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I. The team will identify 5 low achieving students in each homeroom.
The scores from the CAT test, MAP tests will be recorded on data sheets.
A folder will be kept on each student by the team leader.
Teachers will make a conscious effort to give the identified students more:
a) individual help
b) homework
c) one one one tutoring
d) peer tutoring
e) more opportunities to get involved in the classroom
f) lunchtime and after school tutoring especially in Math

II. Each month the scores of these students will be evaluated for progress in the academics.

III. Attendance will also be monitored.

IV. Progress reports will be sent home bi-weekly in Reading and Science

V. Teacher made tests will be recorded in the folders.

VI. Periodic conferences will be held with the students and the team leader. At that time, the student(s) will see their folders.

VII. New names will be added to the list on a monthly basis

VIII. The progress of these students will be shared with the Dean.

BEST COPY AVAILABLE

APPENDIX C

Quarterly Progress Report

to

The Buhl Foundation

Pittsburgh, PA

from

William W. Cooley
Learning Research and Development Center
University of Pittsburgh

Project: The Computer Assisted Professional
Period Covered: September 1, 1985 to November 30, 1985

December 9, 1985

Background

The purpose of this project is to develop and test an information system that will assist the professionals within an elementary school as they plan and implement school improvement. The system has been designed to satisfy the need for data processing and analytic assistance as principals and other professionals in a school attempt to implement the findings of the research on school improvement, findings that include the central notion of monitoring important indicators of student performance and tailoring school practices in light of those indications.

The system has been designed to take advantage of new technology that includes: microcomputers with large storage capacity, telecommunications among computers, the microcomputer-compatible desk-top optical scanner, and generic data base software that greatly facilitates the development of a student information system.

In this work we have two general goals. One is to help the Pittsburgh Public Schools (PPS) move toward more effective use of computers in support of their information requirements, and the other is to learn as much as we can about how to do this, so that other school districts might also benefit from this experience.

Status of Implementation

This project is being conducted as a joint effort of LRDC and PPS. Implementation is taking place in two schools, the M. L. King Elementary School, where the project began last year, and in the new Brookline Elementary Teacher Center.

A primary purpose of the King School implementation this second year is to determine what happens when such a microcomputer system is "owned and operated by" the people in the school. In that school, the school principal, Frank Smizik, and key members of the professional and clerical staff have been trained in the operations of the system, and we are observing such things

as the kinds of problems that occur, how the system is being used, and what information seems to be missing from the system. These observations will have implications for the training requirements for such microcomputer use in the schools as well as implications for further system design and improvement.

In the Brookline Elementary Teacher Center, which began this fall, we have the opportunity to work with the school principal, Anthony Sansonetti, and the director of the teacher center, Claudia Harper-Eaglin, to try to determine how such a system can assist instructional planning and student performance. In that setting, there are three times as many teachers as are normally present in an elementary school, making it possible to arrange sessions with teachers to work with us on the design of an information system that would truly facilitate school improvement.

Functions of the CAP System

We call the system CAP, for Computer Assisted Professional. The primary functions of CAP at this time are: (1) monitoring student achievement; (2) monitoring student attendance; (3) and providing homeroom, scheduling and home information. Each of these functions are briefly described in the following paragraphs.

Achievement Monitoring

One important function of the CAP system is to scan and score the criterion-referenced tests used in the Monitoring Achievement in Pittsburgh (MAP) program. In Pittsburgh schools without CAP, the MAP test answer sheets are sent to the central office for processing and the results are returned to the schools two weeks later. With CAP, test results are available the same day the tests are given. This rapid turn-around is important in testing programs that are designed to guide day-to-day classroom instruction. Also, because the tests are scored within the school, errors in coding the answer forms can be readily detected and corrected. After CAP scans

and scores the MAP tests, teachers receive a classroom report for each instructional group tested, and the principal receives a school-wide summary that includes how well each instructional group did on each of the objectives and on the test as a whole.

Many other reports of MAP results are included in the CAP menus. The most useful ones combine MAP data with other achievement data (e.g., standardized test results [CAT], report card grades, instructional pacing) and achievement related data (e.g., attendance).

Teacher-made tests. With the use of a general purpose answer sheet, teachers are also able to machine score any teacher-made tests which have been adapted to that standard answer sheet. By following directions provided on the computer display, test results can be obtained in a few minutes. Output includes an analysis of each of the test questions, as well as each student's performance.

Focus on reading. Monitoring student reading progress is part of the CAP system. This includes student placement and monthly reading progress for each student. These reports build on the paper and pencil monitoring system developed by the district's School Improvement Project under Louis Venson's direction.

CAT (California Achievement Tests). Individual standardized achievement test results are a part of the data base. These data are used in many different reports, including: Chapter I eligibility report, student achievement monitoring report, individual student reading progress report, and school reading progress report. This work in achievement monitoring is being planned in conjunction with Paul LeMahieu, director of the district's testing, evaluation and research office.

Attendance Monitoring

This fall we have implemented in both schools a new attendance system that collects different kinds of data on absences, tardiness and suspensions every day on a scan form designed by John Barry of the district. This makes it possible to automatically produce a daily absence report in the school, a 20 day summary report needed in reporting to the state, and an update of the student data base.

On demand, CAP will produce reports that include the most serious cases in any category of problem (e.g., unexcussed absences), as well as data needed by the social worker in following up such problems (e.g., home phone numbers).

In addition, these data can be related to achievement data. Attendance data is particularly important in signaling potential failure and dropout problems.

Homeroom and Home Information

Student and teacher schedules. Printouts of schedules are produced and distributed to administrators, clerks, and support personnel. These are used many times daily to locate students or teachers. Previously, the entire school shared one master copy of the schedule which was kept in the main office. As the schedules changed, revised printouts are easily made and copies distributed.

Emergency information. Before the CAP system was introduced in the school, student emergency information was difficult to keep updated. Student address changes were made if parents notified the school, but phone numbers were constantly changing and were very difficult to keep current. Several attempts were made by the school to update the emergency information, but it still was inadequate. A computerized form letter was created which included the current

information on each student and blanks for updating the information. This individualized letter was sent home with each student. The response was tremendous. The emergency information is now current and the CAP system allows the information to be easily updated.

Student address and phone lists. Using the updated home data from the emergency form update, homeroom lists are created with student's address, home phone, parents' work numbers and emergency phone numbers. These are distributed to all the teachers and support staff. These listings are a part of the menu options and when changes have been made, new listings can be made.

Alphabetized student listing. A listing of all students in the school alphabetized by name including their grade assignment, homeroom, home address and home phone is one of the most used listings generated. This is used by the: clerical staff, nurse, social worker, lunch room aides, support staff, principal and assistant principal. Recently the use of this listing cut the task of checking student addresses against transportation bus lists from a two-to-three-day job in previous years to a one-half-day job.

Homeroom listings. An alphabetized list of homeroom members which includes name, grade, CAPAS number, sex, race and homeroom has been a valuable printout. This printout has been used primarily as a homeroom membership verification and as a method to follow student homeroom membership tracking. This is used by: CAP staff, attendance clerk, social workers, Chapter I teachers, and the parent-teacher organization.

Project Plans for the Second Quarter

This fall the district has decided to launch a major effort to implement microcomputers in support of school management functions in all of their schools. Under the overall coordination of James Angevine, they plan to begin in January by piloting a commercially available system for

student scheduling and report card generating. They expect to be in all schools by the fall of 1986.

This decision by the school district to move ahead with a system of local school micros has important implications for this project. Since one of our goals is to be of direct service to the district, we stand ready to assist in their implementation of school-based micros wherever we can.

Also, their decision to purchase commercially available software for student scheduling and report card processing has important implications for our own priorities. The great needs for computer assistance in scheduling and grading was exerting pressure on our CAP project to provide such support. Now that a commercial system has been found that may satisfy that need, we can continue to improve and refine the achievement and attendance monitoring systems that, because of the uniqueness in district practices, are not commercially available (e.g., MAP scoring).

Their decision does suggest, however, the need to examine, in cooperation with district personnel, how CAP can interface with both the districts central computer based Student Tracking and Records System(STARS) and the new commercial micro software, called "The School System." Toward that end, we will be installing CAP in a third site at the district, in their computer headquarters. This will make it possible for Myron Lentz and his computer staff to become familiar with CAP and explore how CAP functions might be integrated with these other functions.

APPENDIX D

LOW ACHIEVING STUDENTS
PLAN SUMMARY

The planning focus for the Low Achieving Students Priority is comprised of three major target activities or programs. Each of these activities or programs is focused on a specific level - Elementary, Middle, or Secondary. The major planning targets are summarized as follows:

1. Community Educational Activity Center (C.E.A.C.) - This planning component deals with the implementation of a pilot program for 100 elementary students who have been diagnosed as "at risk" based on a number of criteria. The program will operate in a community setting on Saturdays, with selected District staff who have received training in dealing with the needs of the selected students. Additionally, provisions are made for: a) extensive parent involvement/ training, b) community volunteer participation, and c) tutoring by selected District students. Recommendations for expansion to other geographic regions will be made after an evaluation of the program impact has been completed.

2. Explorers of Growth Opportunities (E.G.O.) - This planning component deals with the implementation of a middle school pilot program in three school sites. The basic thrust of the program is the institution of a contract learning program for student diagnosed as "at risk" with emphases on study skills, perception skills, and a mentoring component. Six teachers in each pilot site will be selected and trained for the initial program. Recommendations for expansion to other middle schools will be made after an evaluation of the program has been conducted.

3. Secondary Cooperative Learning Program - This planning component deals with the implementation of a secondary pilot program at two selected sites. This program would provide for four enrichment classes (taken for credit) at each site. The program would be staffed by trained ninth grade teachers and counselors who would provide focused instruction and mentoring services for the participating students. Half of the students identified as potential participants would be treated as a control group to determine the impact of the program. After a thorough evaluation of the results, recommendations for modification and/or expansion will be made.

RACIAL ACHIEVEMENT GAP
PLAN SUMMARY

The planning process for The Racial Achievement Gap Priority resulted in approximately twenty eight recommendations. A number of these recommendations are either of an administrative nature or are (can be) included in other Priority plans or District programs. The primary program planning focus deals with four major target activities or programs, and are summarized as follows:

1. The first recommended area of concentration deals with the identification and adaptation of a model that would serve to insure that all students are provided with consistent and unbiased teacher behaviors and high levels of expectation. Additionally, the plans call for the development of training programs and peer observation/feedback strategies which would be based on the selected model. Training would be conducted by staff development personnel and/or other district staff over a several year period.

2. The second recommended area of concentration deals with the planning, design, and implementation of a district wide program of inservice and staff development activities that are designed to increase sensitivity to and awareness of the effects of discriminatory treatment on minorities and the differences in cultural expression and normative behavior common to minority groups. Training would be requested by Principals and their Instructional Cabinets, and should be the responsibility of both the Pupil Services Division and the Staff Development Team.

3. The third recommendation deals with the initiation of a trust fund for disadvantaged students pursuing further education. Students would earn shares, which represent levels of financial support, through academic achievements, attendance, citizenship, etc. Financial support for the trust fund would be sought from corporate, foundation, fund raising, private, and other available resources.

4. The fourth recommendation deals suggests the initiation of peer tutoring/interaction opportunities for students, in order to provide appropriate role models for adolescents. This recommendation is further developed in the Low Achieving Students Priority plan.